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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,334	11/30/2001	Masahiro Sato	NGB-106-A	4987

7590 12/01/2004  
Carrier, Blackman & Associates, P.C.  
24101 Novi Road #100  
Novi, MI 48375

EXAMINER

CULBRETH, ERIC D

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Interview Summary

Application No.

09/997,334

Applicant(s)

SATO ET AL.

Examiner

Eric D Culbreth

Art Unit

3616

All participants (applicant, applicant's representative, PTO personnel):

(1) Eric D Culbreth. (3) \_\_\_\_\_

(2) Mr. Joseph Carrier, applicant's attorney. (4) \_\_\_\_\_

Date of Interview: 24 November 2004.

Type: a) ☒ Telephonic b) ☐ Video Conference  
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☒ Yes e) ☐ No.  
If Yes, brief description: Proposed claims and remarks (attached).

Claim(s) discussed: 1-23 (proposed, attached).

Identification of prior art discussed: Japanese '940, Shiota, Maruyama.


Agreement with respect to the claims f) ☐ was reached. g) ☒ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: The examiner feels the claims may not clearly define over the art of record, especially Japanese '940. Also, the examiner feels the claims may only be an obvious shifting of parts in view of Shiota, who already teaches a piece of cloth passing through the bag, just not at the narrow throat section.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

  
Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

INTELLECTUAL PROPERTY LAW OFFICES

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**FACSIMILE TRANSMISSION COVER SHEET**

DATE: November 18, 2004 ATTY DKT: NGB-106-A YOUR REF: USSN 09/997,334

FILED: 30 November 2001

TITLE: AIR BAG SYSTEM

TO (COMPANY) : US Patent & Trademark Office, Art Unit 3616

ATTN: Eric D. Culbreth

FROM : Joseph P. Carrier

FAX NO. CALLED: (703) 746-3508 NO. OF PAGES (Including this page) 9

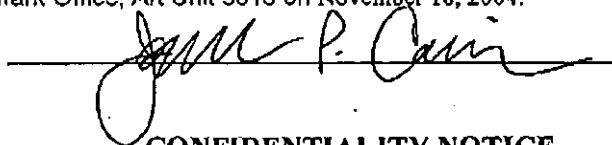
We are also mailing you a confirmation copy of this material if this box is checked. ☐

If the received fax is illegible or incomplete, please call (248) 344-4422 for re-sending.

MESSAGE: Please promptly deliver the attached document (Proposed Amendment-F) to the Examiner. *Please Call to discuss after the proposed changes are considered.*

Certificate of Transmission

I hereby certify that this cover sheet and the enclosed documents are being sent via facsimile transmission to the US Patent & Trademark Office, Art Unit 3616 on November 18, 2004.



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Attorney Docket No. : NGB-106-A

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Sato et al.  
Serial No.: 09/997,334  
Filed: 30 November 2001  
Group Art Unit: 3616  
Examiner: Culbreth, Eric D.  
Confirmation No.: 4987  
Title: **AIR BAG SYSTEM**

**Proposed AMENDMENT-E**

Mail Stop Amendments  
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated 09 September 2004, applicant proposes to amend the application as discussed herein.

**Amendments to the Claims** are reflected in the listing of claims which begins on page 2 of this paper.

**Remarks** begin on page 7 of this paper.

IN THE CLAIMS

Applicant proposes to amend Claims 1-3, 5, 9 and 17 as shown below, in which deleted terms are indicated with strikethrough and/or added terms are indicated with underscoring

Claim 1 (currently amended). An air bag in a folded state housed in an instrument panel, the air bag inflating by an inflator when a vehicle is crashed, the air bag comprising:

- an opening portion into which a gas generated by the inflator flows;
- a gas flow path portion extending continuously from the opening portion; and
- an occupant restraint portion being spaced from the opening portion and extending continuously from the gas flow path portion,

the gas flow path portion comprising a narrow throated gas passageway between the opening portion and the occupant restraint portion,

whereby the gas flows from the opening portion to the occupant restraint portion through the gas flow path portion, and

the gas flow path portion including at least one flow-constricting penetrating portion disposed adjacent to said opening portion, ~~[[and]]~~ which constricts and regulates the gas flowing into the air bag, and a size of said at least one penetrating portion being selected as to achieve a flow rate of the gas from the inflator into the air bag based on size of the air bag.

Claim 2 (Currently amended). The air bag according to Claim 1, wherein the penetrating portion divides said gas flow path portion into two or more flow paths ~~for flowing~~ through which the gas flows from the opening portion to the occupant restraint portion ~~through the gas flow path portion.~~

Claim 3 (currently amended). An air bag in a folded state housed in an instrument panel, the air bag inflating by an inflator when a vehicle is crashed, the air bag comprising:

an opening portion into which a gas generated by the inflator flows;  
a gas flow path portion extending continuously from the opening portion; and  
an occupant restraint portion being spaced from the opening portion,  
the gas flow path portion comprising a narrow throated gas passageway between the opening portion and the occupant restraint portion,

whereby the gas flows from the opening portion to the occupant restraint portion through the gas flow path portion, and

at least one flow-constricting joint portion, disposed adjacent to the opening portion, ~~is located~~ within the air bag, the joint portion dividing the gas flow path portion into two or more paths ~~for flowing and regulating~~ through which the gas flows from the opening portion to the occupant restraint portion ~~through~~ via the throated gas passageway of the gas flow path portion, ~~[[and]]~~ said at least one joint portion ~~[[is]]~~ being located only in the gas flow path portion, and a size of said at least one joint portion being selected as to achieve a flow rate of the gas from the inflator into the air bag based on size of the air bag.

Claim 4 (canceled).

Claim 5 (currently amended) The air bag according to Claim 3, wherein the joint portion is formed by partially sewing parts of the gas flow path portion together such that the opposed sides of the airbag are contiguous and confronting along the sewn seam.

Claim 6 (original). The air bag according to Claim 1, including a plurality of said

penetrating portions.

Claim 7 (original). The air bag according to Claim 1, wherein said penetrating portion reduces an opening area of said gas flow path portion.

Claim 8 (original). The air bag according to Claim 6, wherein said penetrating portions reduce an opening area of said gas flow path portion.

Claim 9 (Currently amended). The air bag according to Claim 6, wherein the penetrating portions divide said gas flow path portion into multiple flow paths ~~for flowing~~ through which the gas flows from the opening portion to the occupant restraint portion through ~~the gas flow path portion~~.

Claims 10-11 (canceled).

Claim 12 (original). The air bag according to Claim 3, including a plurality of said joint portions.

Claim 13 (original). The air bag according to Claim 3, wherein said joint portion reduces an opening area of said gas flow path portion.

Claim 14 (original). The air bag according to Claim 12, wherein said joint portions reduce an opening area of said gas flow path portion.



Claim 15 (original). The air bag according to Claim 12, wherein the joint portions divide said gas flow path portion into multiple flow paths for flowing the gas from the opening portion to the occupant restraint portion through the gas flow path portion.

Claim 16 (previously presented). The air bag according to Claim 1, wherein the penetrating portion is sealed in a manner such that fluid communication between the inside of said air bag and ambient air outside the bag via the penetrating portion is substantially prevented.

Claim 17 (currently amended). An air bag in a folded state housed in an instrument panel, the air bag inflatable by an inflator when a vehicle is crashed, the air bag comprising:

an opening portion into which a gas generated by the inflator flows;  
a gas flow path portion attached to the opening portion; and  
an occupant restraint portion attached to the gas flow path portion,  
the gas flow path portion comprising an elongate gas passageway between the opening portion and the occupant restraint portion which is narrow relative to the occupant restraint portion,

whereby the gas flows from the opening portion to the occupant restraint portion through the gas flow path portion, and

the air bag including at least one flow-constricting penetrating portion, disposed adjacent to the opening portion, extending therethrough, said penetrating portion being sealed in a manner such that fluid communication between the inside of said air bag and ambient air outside the bag via the penetrating portion is substantially prevented, [[and]] said at least one penetrating portion is located only in the gas flow path portion, and a size of said at least one penetrating portion being selected as to achieve a flow rate of the gas from the inflator into the

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air bag based on size of the air bag.

Claim 18 (previously presented). The air bag according to Claim 17, wherein the penetrating portion extends through said gas flow path portion of said air bag and restricts the volume of gas that can flow therethrough.

Claim 19 (previously presented). The air bag according to Claim 3, wherein the joint portion reduces a volume of said air bag.

Claim 20 (previously presented). The air bag according to Claim 3, wherein the joint portion directly connects opposing upper and lower exterior surfaces of the gas flow path portion of said air bag, whereby the area opening of the gas flow path portion is reduced.

Claim 21 (previously presented). The air bag according to Claim 1, wherein said gas flow path portion of said air bag is a portion which extends above an upper surface of the instrument panel to substantially cover the upper surface when the air bag is inflated.

Claim 22 (previously presented). The air bag according to claim 3, wherein said joint portion directly joins opposing exterior surfaces of said air bag together.

Claim 23 (previously presented). The air bag according to Claim 17, wherein said gas flow path portion of said air bag is a portion which extends above an upper surface of the instrument panel to substantially cover the upper surface when the air bag is inflated.

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REMARKS

Upon entry of the present Amendment, the claims in the application will be claims 1-3, 5-9, and 12-23, of which claims 1, 3 and 17 are independent.

In the above proposed amendments, independent claims 1, 3 and 17 are modified to further specifically define: that the gas flow path portion comprising a narrow throated gas passageway between the opening portion and the occupant restraint portion; and that a size of said at least one penetrating portion being selected as to achieve a flow rate of the gas from the inflator into the air bag based on size of the air bag. Also, claims 2, 3 and 9 are amended to overcome the rejection of claims 2, 3, 5, 9, 12-15, 19, 20 and 22 under 35 USC 112, second paragraph.

Applicant respectfully submits that all of the above amendments are fully supported throughout the original application. Applicant further respectfully submits that the above amendments do not introduce any new matter into the application.

Art Based Rejections

In the Office Action, the Examiner rejects: claims 1-3, 7 and 16-19 under 35 U.S.C. 102(b) as anticipated by Shiota et al. (US Patent 5,427,410); claims 3, 5 and 12-15 under 35 U.S.C. 102(b) as anticipated by Maruyama (US Patent 5,593,179); claims 6, 8 and 9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Shiota; and claims 20-23 are rejected over Japanese 4135940 (of record) in view of Maruyama. Relative to the Shiota patent, it is the Examiner's position that Shiota's airbag 10 having the cylindrical cloth 108 disposed therein reads on the airbag having at least one penetrating portion or at least one joint portion as defined in claims 1-3, 7 and 16-20, wherein the gas flow path extends continuously from the opening portion, and the same continues to an occupant restraint portion, and hence, the gas flows continuously from the opening portion to the occupant restraint portion through the gas flow path portion. In addition,

the Examiner also asserts that the cloth 108 is a penetrating portion, which extends through the gas flow path portion, and that it would have been obvious to include a plurality of such penetrating portions, such as cylindrical cloth 108, in Shiota's air bag for cumulative effect as an obvious variation of the design. Regarding the Maruyama's patent, it is the Examiner's position that the air bag device disclosed in this reference includes all of the features set forth in the rejected claims viewing Maruyama's guide member 20 as connected within his air bag as the claimed joint portions, whereas such guide member is disposed only in the gas flow path portion of the airbag as indicated in his Fig. 2.

Applicant's Response

Upon careful consideration, and in light of the respective amendments to claims 1, 3, and 17, applicant respectfully submits that each of the Examiner's rejections are overcome, and submits that each of present claims 1-3, 6-9 and 16-19 is allowable over the references of record.

Applicant respectfully requests that the telephonically contact applicant's undersigned representative to discuss the above-proposed amendments..

Customer No. 21828  
Carrier, Blackman & Associates, P.C.  
24101 Novi Road, Suite 100  
Novi, Michigan 48375  
November 18, 2004

Respectfully submitted,

\_\_\_\_\_  
Joseph P. Carrier  
Attorney for Applicant  
Registration No. 31,748  
(248) 344-4422

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being submitted via facsimile transmission to the US Patent & Trademark Office, Art Unit 3616, on November 18, 2004.